In the claims:

For the Examiner's convenience, all pending claims are presented below with changes shown.

1.   (Currently Amended) A method comprising:
     receiving a code segment having a plurality of instructions, the code segment having an outer scope and a number of inner scopes, wherein the plurality of instructions comprise a number of pointers, wherein at least one of the number of pointers is a restricted pointer; and
     determining, within one of the number of inner scopes, whether at least two pointers of the number of pointers are aliases.

2.   (Original)   The method of claim 1, comprising determining a base pointer for each pointer of the number of pointers.

3.   (Original)   The method of claim 2, wherein the determining a base pointer for each pointer of the number of pointers comprises:
     grouping pointers together upon determining that the pointers are copied to a pointer that is not a restricted pointer.

4.   (Original)   The method of claim 3, wherein there is no grouping of pointers when the pointers have distinct base pointers.

5.   (Original)   The method of claim 3, comprising for each instruction of the plurality of instructions that accesses a pointer, determining which at least one restricted pointer is within the scope of the pointer when the pointer is accessed.

6.   (Original)   The method of claim 4, wherein the determining, within one of the number of inner scopes, whether at least two pointers of the number of pointers are aliases is based on the base pointer for each of the number of pointers.

7.   (Original)   The method of claim 3, wherein the determining, within one of the number of inner scopes, whether at least two pointers of the number of pointers are aliases is based on, for each instruction of the plurality of instructions that accesses the pointer, which at least one restricted pointer is within the scope of the pointer, when the pointer is accessed.

8.   (Currently Amended) A method comprising:

receiving a code segment having a plurality of instructions, wherein the plurality of instructions comprise a number of pointers, wherein at least one of the number of pointers is a restricted pointer, and wherein the at least one restricted pointer is in-scope or out-of-scope; and

determining whether at least two pointers of the number of pointers are aliases when each pointer of the at least two pointers is out-of-scope relative to the other pointers of the at least two pointers.

9.   (Original)   The method of claim 8 comprising determining a base pointer for each pointer of the number of pointers.

10.   (Original)   The method of claim 9, comprising determining, for each pointer of the number of pointers, whether each at least one restricted pointer is in-scope when the pointer of the number of pointers is accessed.

11. (Original) The method of claim 10 wherein the determining whether at least two pointers of the number of pointers are aliases is based on determining a base pointer for each pointer of the number of pointers.

12. (Original) The method of claim 10 wherein the determining whether at least two pointers of the number of pointers are aliases is based on determining a base pointer for each pointer of the number of pointers, and on determining for each pointer of the number of pointers whether each at least one restricted pointer is in-scope when the pointer is accessed.

13. (Currently Amended) A system comprising:

a memory unit to include a code segment having a plurality of instructions, the code segment having an outer scope and a number of inner scopes, wherein the plurality of instructions comprise a number of pointers, wherein at least one of the number of pointers is a restricted pointer; and

a compiler unit coupled to the memory, the compiler unit to determine within one of the number of inner scopes, whether at least two pointers of the number of pointers are aliases.

14. (Original) The system of claim 13, wherein the compiler unit is to determine a base pointer for each pointer of the number of pointers.

15. (Original) The system of claim 14, wherein the compiler unit is to determine, for each instruction of the plurality of instructions that accesses a pointer, which at least one restricted pointer is within the scope of the pointer when the pointer is accessed.

16.   (Original)   The system of claim 15, wherein the compiler unit is to determine, within one of the number of inner scopes, whether at least two pointers of the number of pointers are aliases based on, for each instruction of the plurality of instructions that accesses a pointer, which of the restricted pointers is within the scope of the pointer when the pointer is accessed.

17.   (Currently Amended) A machine-readable medium that provides instructions, which when executed by a machine, cause said machine to perform operations comprising:

receiving a code segment having a plurality of instructions, the code segment having an outer scope and a number of inner scopes, wherein the plurality of instructions comprise a number of pointers, wherein at least one of the number of pointers is a restricted pointer; and

determining, within one of the number of inner scopes, whether at least two pointers of the number of pointers are aliases.

18.   (Original)   The machine-readable medium of claim 17, comprising determining a base pointer for each pointer of the number of pointers.

19.   (Original)   The machine-readable medium of claim 18, comprising for each instruction of the plurality of instructions that accesses a pointer, determining which at least one restricted pointer is within the scope of the pointer when the pointer is accessed.

20.   (Original)   The machine-readable medium of claim 19, wherein the determining, within one of the number of inner scopes, whether at least two pointers of the number of pointers are aliases is based on the base pointer for each of the number of pointers.

21.   (Original)   The machine-readable medium of claim 19, wherein the determining, within one of the number of inner scopes, whether at least two pointers of the number of pointers are aliases is based on, for each instruction of the plurality of instructions that accesses the pointer, which at least one restricted pointer is within the scope of the pointer, when the pointer is accessed.

22.   (Currently Amended) A machine-readable medium that provides instructions, which when executed by a machine, cause said machine to perform operations comprising:

receiving a code segment having a plurality of instructions, wherein the plurality of instructions comprise a number of pointers, wherein at least one of the number of pointers is a restricted pointer, and wherein the at least one restricted pointer is in-scope or out-of-scope; and

determining whether at least two pointers of the number of pointers are aliases when each pointer of the at least two pointers is out-of-scope relative to other pointers of the at least two pointers.

23.   (Original)   The machine-readable medium of claim 22, comprising determining a base pointer for each pointer of the number of pointers.

24.   (Original)   The machine-readable medium of claim 23, comprising determining, for each pointer of the number of pointers, whether each at least one restricted pointer is in-scope when the pointer of the number of pointers is accessed.

25.   (Original)   The machine-readable medium of claim 24, wherein the determining, within one of the number of inner scopes, whether at least two pointers of the number of pointers are aliases is based on the base pointer for each of the number of pointers.

26.   (Original)   The machine-readable medium of claim 24, wherein the determining whether at least two pointers of the number of pointers are aliases is based on determining a base pointer for each pointer of the number of pointers, and on determining for each pointer of the number of pointers whether each at least one restricted pointer is in-scope when the pointer is accessed.